

University of Maine)	Departmental
Penobscot County)	Findings of Fact and Order
Orono, Maine)	Part 70 Air Emission License
A-204-70-A-I)	

After review of the Initial Part 70 License application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A, Section 344 and Section 590, the Department finds the following facts:

I. Registration

A. Introduction

FACILITY	University of Maine (UMaine)
LICENSE NUMBER	A-204-70-A-I
LICENSE TYPE	Initial Part 70 License
SIC CODES	8221
NATURE OF BUSINESS	Educational Facility
FACILITY LOCATION	Orono, Maine
DATE OF LICENSE ISSUANCE	November 6, 2000
LICENSE EXPIRATION DATE	November 6, 2005

B. Emission Equipment

The following emission units are addressed by this Part 70 License:

EMISSION UNIT ID	UNIT CAPACITY	UNIT TYPE
#1, Boiler #3	34.5 MMBtu/hr	Boiler
#2, Boiler #4	34.5 MMBtu/hr	Boiler
#3, Boiler #5	73.6 MMBtu/hr	Boiler
#4, Boiler #6	73.6 MMBtu/hr	Boiler
#5, Boiler #7	73.6 MMBtu/hr	Boiler
#6, Science Center #1	4.4 MMBtu/hr	Boiler
#7, Science Center #2	4.4 MMBtu/hr	Boiler
#8, Service Building	4.9 MMBtu/hr	Boiler
#9, Hitchner Hall Incinerator	85 lb/hr	Class IV-A incinerator
#10, Printing Services	variable	Miscellaneous equipment

UMaine has no other significant activities which need to be listed in the emission equipment table above. A list of the insignificant activities at UMaine can be found in the application for an initial Part 70 license submitted to the Department on October 28, 1997.

C. Application Classification

The application for UMaine does not include the licensing of increased emissions or the installation of new or modified equipment, therefore the license is considered to be an Initial Part 70 License issued under Chapter 140 of the Department's regulations for a Part 70 source.

II. EMISSION UNIT DESCRIPTION

A. Process Description

UMaine is an educational facility located in Orono, Maine. The facility operates several pieces of fuel burning equipment for facility steam needs. Also operated at this facility are smaller sources of emissions such as printing facilities, a class IV-A incinerator, gasoline storage tanks and solvent degreasers.

NO_x RACT

UMaine is in an attainment area for all US EPA designated criteria air pollutants, however, Penobscot County is designated as a transport region for ozone. Chapter 138 of the Maine Air Regulations requires that every source which has the potential to emit equal to or greater than 100 tons per year apply NO_x RACT to their applicable NO_x emissions. Chapter 138 NO_x RACT requirements are incorporated into this initial Part 70 license.

B. Boilers #3 and #4, oil-fired boilers

Unit Size and Age

Boilers #3 and #4 were manufactured by Babcock and Wilcox with a maximum design heat input of 34.5 MMBtu/hr each, firing #6 fuel oil. Each boiler was installed in 1946, prior to the New Source Performance Standards (NSPS) Subpart Dc applicability date. The boilers are used for facility steam needs for heat and hot water. Emissions exit through stack #1 which is a 138 foot above ground level stack (AGL).

Streamlining

Opacity

This license does not include streamlining for opacity requirements. Chapter 101, Section 2(D) of the Department's regulations and Chapter 140 Best Practical Treatment (BPT) requirements are applicable. The Chapter 101 opacity limit is federally enforceable; the Chapter 140 opacity limit is enforceable by the state only.

Periodic Monitoring

Periodic monitoring shall consist of recordkeeping which includes records of fuel use indicating the quantity of fuel delivered (gallons), through fuel oil analysis' provided by the supplier for each tank from which fuel is supplied to the University conducted for each new delivery to the supplier indicating amounts (gallons) and percent sulfur by weight, and percent nitrogen by weight, along with an inventory of the fuel in and out of the single fuel oil storage tank taken at the beginning of each month and at the end of each month.

C. Boilers #5, #6 and #7, oil-fired boilers

Unit Size and Age

Boilers #5, #6 and #7 were manufactured by Babcock and Wilcox with a maximum design heat input of 73.6 MMBtu/hr each, firing #6 fuel oil. Each boiler was installed in 1958, 1961 and 1966, respectively, prior to the New Source Performance Standards (NSPS) Subpart Dc applicability date. The boilers are used for facility steam needs for heat and hot water. Emissions for boilers #5 and #6 exit through stack #4 which is a 150 foot above ground level stack (AGL) and boiler #7 exits through stack #1 with boilers #3 and #4.

Streamlining

Opacity

This license does not include streamlining for opacity requirements. Chapter 101, Section 2(D) of the Department's regulations and Chapter 140 Best Practical Treatment (BPT) requirements are applicable. The Chapter 101 opacity limit is federally enforceable; the Chapter 140 opacity limit is enforceable by the state only.

Periodic Monitoring

Periodic monitoring shall consist of recordkeeping which includes records of fuel use indicating the quantity of fuel delivered (gallons), through fuel oil analysis' provided by the supplier for each tank from which fuel is supplied to the University conducted for each new delivery to the supplier indicating amounts (gallons) and percent sulfur by weight, and percent nitrogen by weight, along with an inventory of the fuel in and out of the single fuel oil storage tank taken at the beginning of each month and at the end of each month.

D. Science Center Boilers #1 and #2, oil-fired boilers

Unit Size

Science Center boilers #1 and #2 were manufactured by H.B. Smith with a maximum design heat input of 4.4 MMBtu/hr each, firing #2 fuel oil. The boilers are used for facility steam needs for heat and hot water. Emissions exit through stack #sc1.

Streamlining

Opacity

This license does not include streamlining for opacity requirements. Chapter 101, Section 2(D) of the Department's regulations and Chapter 140 Best Practical Treatment (BPT) requirements are applicable. The Chapter 101 opacity limit is federally enforceable; the Chapter 140 opacity limit is enforceable by the state only.

Sulfur Dioxide

UMaine accepts streamlining for sulfur dioxide requirements. Chapter 106 is applicable; however, the BPT limit for sulfur dioxide is more stringent and is therefore included in this license.

Periodic Monitoring

Periodic monitoring shall consist of recordkeeping on a facility-wide basis which includes records of fuel use through purchase receipts indicating amounts (gallons) and fuel type. The fuel records shall be kept on a monthly basis and a 12-month rolling total basis.

E. Service Building Boiler, oil-fired boiler

Unit Size

The Service Building boiler was manufactured by Keweenaw with a maximum design heat input of 4.9 MMBtu/hr firing #2 fuel oil. The boiler is used for facility heat and hot water. Emissions exit through stack #sb.

Streamlining

Opacity

This license does not include streamlining for opacity requirements. Chapter 101, Section 2(A)(1) of the Department's regulations and Chapter 140 Best Practical Treatment (BPT) requirements are applicable. The Chapter 101 opacity limit is federally enforceable; the Chapter 140 opacity limit is enforceable by the state only.

Sulfur Dioxide

UMaine accepts streamlining for sulfur dioxide requirements. Chapter 106 is applicable; however, the BPT limit for sulfur dioxide is more stringent and is therefore included in this license.

Periodic Monitoring

Periodic monitoring shall consist of recordkeeping on a facility-wide basis which includes records of fuel use through purchase receipts indicating amounts (gallons) and fuel type. The fuel records shall be kept on a monthly basis and a 12-month rolling total basis.

F. Hitchner Hall Incinerator, Class IV-A Incinerator

UMaine operates a class IV-A incinerator for the disposal of animal remains, type 4 waste. This unit was manufactured by Consumat and is a model C32-P, with a primary and secondary chamber each rated at 350,000 Btu/hr firing propane as an auxiliary fuel.

Streamlining

Opacity

This license does not include streamlining for opacity requirements. Chapter 104, Section 2(A) of the Department's regulations and Chapter 140 Best Practical Treatment (BPT) requirements are applicable. The Chapter 104 opacity limit is federally enforceable; the Chapter 140 opacity limit is enforceable by the state only.

Periodic Monitoring

Periodic monitoring shall consist of recordkeeping which includes recording the weight of waste charged, preheat time, charging time and the temperature of the secondary chamber every 60 minutes after start-up until, and including, final shutdown time as documented by the use of a continuous chart recorder.

G. Printing Services

UMaine has a printing services department that includes five (5) sheet-fed offset printers, one letterpress, and a pre-press department. This equipment is used to produce a variety of publications.

Periodic Monitoring

Periodic monitoring for the printing services department shall consist of recordkeeping of all chemical usage to include the amount used, the VOC content and percentage HAP for each of those chemicals on an annual basis.

H. Solvent Degreasers

UMaine operates various solvent degreasers throughout the facility.

Periodic Monitoring

Periodic monitoring for the degreaser units shall consist of recordkeeping including records of solvent added.

I. Gasoline Storage Tanks

UMaine operates several gasoline storage tanks for the dispensing of gasoline.

Periodic Monitoring

Periodic monitoring for the gasoline dispensing facilities shall consist of recordkeeping including records of monthly throughput.

J. Miscellaneous Emission Units with Applicable Requirements

Miscellaneous units include various small fuel burning sources.

Periodic Monitoring

The insignificant emission units are subject to generally applicable requirements, and a regular program of monitoring will not significantly enhance the ability of the license to assure compliance with the general applicable requirement. Therefore, no monitoring is required for these units.

K. Facility Emissions

Based upon the equipment listed on the license in Section 1(B) above, the total allowable annual emissions for UMaine are as follows:

Total Allowable Annual Emissions for the Facility
(used to calculate the license fee)

Pollutant	Tons/Year
PM	60.2
PM ₁₀	60.2
SO ₂	567.7
NO _x	157.1
CO	178.6
VOC	32.8

III. AIR QUALITY ANALYSIS

During recent modeling efforts conducted by Parsons Engineering for Fort James Paper (Old Town), it was shown that several SO₂ violations were reported to occur, some of which were directly attributed to the University of Maine if UMaine were to operate all boilers at the maximum rates allowed by the current license. Because Fort James' impacts at these violations were considered significant, their permit could not be issued until the modeled violations were resolved.

Parsons Engineering worked in conjunction with both Fort James and University of Maine to determine scenarios that could likely demonstrate compliance.

Using this methodology, an acceptable modeling demonstration was submitted for both facilities, with the results showing that all applicable MAAQS could be met.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that emissions from this source:

- will receive Best Practical Treatment;
- will not violate applicable emissions standards
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants the Part 70 License A-204-70-A-I, subject to the following conditions:

For each standard and special condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State-only.**

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emission units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions and this license;
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 140;
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both;
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request; **Enforceable by State-only**

- (5) The licensee shall pay the annual air emissions license fee to the Department, calculated pursuant to Title 38 MRSA § 353;
- (6) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege;
- (7) The licensee shall maintain and operate all emission units and air pollution control systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions; **Enforceable by State-only**
- (8) The licensee shall maintain sufficient records, to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request or in accordance with other provisions of this license;
- (9) The licensee shall comply with all terms and conditions of the air emission license. The submission of notice of intent to reopen for cause by the Department, the filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for the renewal of a Part 70 license or amendment shall not stay any condition of the Part 70 license.
- (10) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable.
- (11) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license;
- (12) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
 - (a) perform stack testing under circumstances representative of the facility's normal process and operating conditions:
 - (i) within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions;

- (ii) to demonstrate compliance with the applicable emission standards; or
- (iii) pursuant to any other requirement of this license to perform stack testing.
- (b) install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emissions testing; and
- (c) submit a written report to the Department within thirty (30) days from the date of test completion.

Enforceable by State-only

- (13) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicates emissions in excess of the applicable standards, then:
 - (a) within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
 - (b) the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
 - (c) the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

Enforceable by State-only

- (14) Notwithstanding any other provision in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement.

(15) Compliance with the conditions of this Part 70 license shall be deemed compliance with any Applicable requirement as of the date of license issuance and is deemed a permit shield, provided that:

(a) Such Applicable and state requirements are included and are specifically identified in the Part 70 license, except where the Part 70 license term or condition is specifically identified as not having a permit shield; or

(b) The Department, in acting on the Part 70 license application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the Part 70 license includes the determination or a concise summary, thereof.

Nothing in this section or any Part 70 license shall alter or effect the provisions of Section 303 of the CAA (emergency orders), including the authority of EPA under Section 303; the liability of an owner or operator of a source for any violation of Applicable requirements prior to or at the time of permit issuance; or the ability of EPA to obtain information from a source pursuant to section 114 of the CAA.

(16) The licensee shall retain records of all required monitoring data and support information for a period of at least six (6) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Part 70 license.

(17) The licensee shall maintain records of all deviations from license requirements. Such deviations shall include, but are not limited to malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emission unit itself that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next working day, whichever is later, of such occasions and shall report the probable cause, corrective action, and any excess emissions in the units of the applicable emission limitation;

(18) Upon the written request of the Department, the licensee shall establish and maintain such records, make such reports, install, use, and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status.

- (19) The licensee shall submit semiannual reports of any required periodic monitoring. All instances of deviations from Part 70 license requirements must be clearly identified in such reports. All required reports must be certified by a responsible official.
- (20) The licensee shall submit a compliance certification to the Department and EPA at least annually, or more frequent if specified in the Applicable requirement by the Department. The compliance certification shall include the following:
- (a) The identification of each term or condition of the Part 70 license that is the basis of the certification;
 - (b) The compliance status;
 - (c) Whether compliance was continuous or intermittent;
 - (d) The method(s) used for determining the compliance status of the source, currently and over the reporting period; and
 - (e) Such other facts as the Department may require to determine the compliance status of the source;
- (21) The Part 70 license shall be reopened for cause by the Department or EPA, prior to the expiration of the Part 70 license, if:
- (a) Additional Applicable requirements under the CAA become applicable to the Part 70 major source with a remaining Part 70 license term of 3 or more years. However, no opening is required if the effective date of the requirement is later than the date on which the Part 70 license is due to expire, unless the original Part 70 license or any of its terms and conditions has been extended pursuant to Chapter 140;
 - (b) Additional requirements (including excess emissions requirements) become applicable to the Title IV source under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the Part 70 license;
 - (c) The Department or EPA determines that the Part 70 license contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms of conditions of the Part 70 license; or
 - (d) The Department or EPA determines that the Part 70 license must be revised or revoked to assure compliance with the Applicable requirements.

The licensee shall furnish to the Department within a reasonable time any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the Part 70 license or to determine compliance with the Part 70 license.

- (22) No license revision or amendment shall be required, under any approved economic incentives, marketable licenses, emissions trading and other similar programs or processes for changes that are provided for in the Part 70 license.

SPECIAL CONDITIONS

- (23) Boilers #3 and #4
- A. UMaine is licensed to operate boilers #3 and #4 each with a maximum design heat input of 34.5 MMBtu/hr. [ME DEP, Chapter 140, BPT] **Enforceable by State-only**
- B. The sulfur content of the fuel oil fired in boilers #3 and #4 shall not exceed 2.0% by weight demonstrated by purchase records from the supplier. [ME DEP, Chapter 106]

- C. Emissions from boilers #3 and #4 shall each not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.20	ME DEP, Chapter 103, Section 2(A)(1)	-
PM ₁₀	0.20	ME DEP, Chapter 140, BPT	Enforceable by State-only
NO _x	0.50	ME DEP, Chapter 140, BPT	Enforceable by State-only

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	6.9	ME DEP, Chapter 140, BPT	Enforceable by State-only
PM ₁₀	6.9	ME DEP, Chapter 140, BPT	Enforceable by State-only
SO ₂	72.5	ME DEP, Chapter 140, BPT	Enforceable by State-only
NO _x	17.3	ME DEP, Chapter 140, BPT	Enforceable by State-only
CO	20.7	ME DEP, Chapter 140, BPT	Enforceable by State-only
VOC	3.5	ME DEP, Chapter 140, BPT	Enforceable by State-only

- D. UMaine shall conduct annual tune-ups on boilers #3 and #4 in accordance with Chapter 138, Section 3(L). [ME DEP, Chapter 138, NO_x RACT]

(24) Boilers #5, #6 and #7

A. UMaine is licensed to operate boilers #5, #6 and #7 each with a maximum design heat input of 73.6 MMBtu/hr. [ME DEP, Chapter 140, BPT]

Enforceable by State-only

B. The sulfur content of the fuel oil fired in boilers #5, #6 and #7 shall not exceed 2.0% by weight demonstrated by purchase records from the supplier. [ME DEP, Chapter 106]

C. Emissions from boilers #5, #6 and #7 shall each not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.20	ME DEP, Chapter 103, Section 2(A)(1)	-
PM ₁₀	0.20	ME DEP, Chapter 140, BPT	Enforceable by State-only
NO _x (≤0.45% nitrogen)*	0.50	ME DEP, Chapter 138	-
NO _x (>0.45% nitrogen)*	0.55	ME DEP, Chapter 138	-

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	14.7	ME DEP, Chapter 140, BPT	Enforceable by State-only
PM ₁₀	14.7	ME DEP, Chapter 140, BPT	Enforceable by State-only
SO ₂	154.6	ME DEP, Chapter 140, BPT	Enforceable by State-only
NO _x (≤0.45% nitrogen)*	36.8	ME DEP, Chapter 140, BPT	Enforceable by State-only
NO _x (>0.45% nitrogen)*	40.5	ME DEP, Chapter 140, BPT	Enforceable by State-only
CO	44.2	ME DEP, Chapter 140, BPT	Enforceable by State-only
VOC	7.4	ME DEP, Chapter 140, BPT	Enforceable by State-only

*: denotes the nitrogen content in the fuel

D. UMaine shall conduct annual tune-ups on boilers #5, #6 and #7 in accordance with Chapter 138, Section 3(L). [ME DEP, Chapter 138]

E. Boilers #5, #6 and #7 shall not exceed a fuel use limit of 600,000 gallons during the period of May 1 through September 30 of any calendar year. [ME DEP, Chapter 138]

- F. Boilers #5, #6 and #7 shall be equipped with oxygen trim systems that shall be maintained and in operation when the units are in operation. Operation shall be automatic at higher steam production rates and manual when automatic mode does not reflect good engineering practice. [ME DEP, Chapter 140, BPT] **Enforceable by State-only**
- (25) Opacity for boilers #3 - #7
- A. 1. UMaine shall operate boilers #3, #4 and #7 such that visible emission from stack #1 do not exceed 30% opacity on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in any 3-hour period. [ME DEP, Chapter 140, BPT] **Enforceable by State-only**
2. UMaine shall operate boilers #5 and #6 such that visible emissions from stack #4 do not exceed 30% opacity on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in any 3-hour period. [ME DEP, Chapter 140, BPT] **Enforceable by State-only**
- B. 1. UMaine shall operate boilers #3, #4 and #7 such that visible air contaminants emitted through stack #1 do not exceed an opacity of 40% for more than 20 minutes in any continuous 2-hour period or 80% for more than 10 minutes in any one hour. [ME DEP, Chapter 101]
2. UMaine shall operate boilers #5 and #6 such that visible air contaminants emitted through stack #4 do not exceed an opacity of 40% for more than 20 minutes in any continuous 2-hour period or 80% for more than 10 minutes in any one hour. [ME DEP, Chapter 101]
- (26) UMaine shall be restricted to the following firing rates for boilers #3 - #7: [ME DEP, Chapter 140, BPT] **Enforceable by State-only**
- A. from May 1 through September 30 UMaine shall not exceed a firing rate of 721 gal/hr, and
- B. from October 1 through April 30 UMaine shall not exceed a firing rate of 981.3 gal/hr.

UMaine shall maintain records of the total fuel supplied to boilers #3 - #7 through operation of a single flow meter, to be installed by November 1, 2000, on the common fuel supply line to demonstrate compliance with the above restrictions. In situations where the fuel meter output accuracy is affected, including but not limited to situations such as oil circulation prior to start-up and the use of a back-up fuel supply system, compliance with hourly limits at all times during the calendar year shall be demonstrated by compliance with a steam production limit of 88,000 lb/hr from May 1 through September 30 and of 120,000 lb/hr from October 1 through April 30.

(27) Science Center Boilers #1 and #2

A. The sulfur content of the fuel oil fired in the science center boilers #1 and #2 shall not exceed 0.5% by weight demonstrated by delivery receipts stating the type of fuel delivered. [ME DEP, Chapter 140, BPT]

B. Emissions from the science center boilers #1 and #2 shall each not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.12	ME DEP, Chapter 103, Section 2(B)(1)(a)	-
PM ₁₀	0.12	ME DEP, Chapter 140, BPT	Enforceable by State-only

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	0.53	ME DEP, Chapter 140, BPT	Enforceable by State-only
PM ₁₀	0.53	ME DEP, Chapter 140, BPT	Enforceable by State-only
SO ₂	2.2	ME DEP, Chapter 140, BPT	Enforceable by State-only
NO _x	1.6	ME DEP, Chapter 140, BPT	Enforceable by State-only
CO	1.3	ME DEP, Chapter 140, BPT	Enforceable by State-only
VOC	0.04	ME DEP, Chapter 140, BPT	Enforceable by State-only

C. 1. UMaine shall operate the science center boilers #1 and #2 each, such that the visible emissions do not exceed 20% opacity on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in any 3-hour period. [ME DEP, Chapter 140, BPT]
Enforceable by State-only

2. UMaine shall operate the science center boilers such that visible air contaminants emitted do not exceed an opacity of 40% for more than 20 minutes in any continuous 2-hour period or 80% for more than 10 minutes in any one hour. [ME DEP, Chapter 101]

(28) Service Building Boiler

A. The sulfur content of the fuel oil fired in the service building boiler shall not exceed 0.5% by weight demonstrated by delivery receipt stating the type of fuel delivered. [ME DEP, Chapter 140, BPT]

B. Emissions from the service building boiler shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.20	ME DEP, Chapter 103, Section 2(A)(1)	-
PM ₁₀	0.20	ME DEP, Chapter 140, BPT	Enforceable by State-only

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	0.98	ME DEP, Chapter 140, BPT	Enforceable by State-only
PM ₁₀	0.98	ME DEP, Chapter 140, BPT	Enforceable by State-only
SO ₂	2.5	ME DEP, Chapter 140, BPT	Enforceable by State-only
NO _x	1.7	ME DEP, Chapter 140, BPT	Enforceable by State-only
CO	2.9	ME DEP, Chapter 140, BPT	Enforceable by State-only
VOC	0.49	ME DEP, Chapter 140, BPT	Enforceable by State-only

- C. 1. UMaine shall operate the service building boiler such that the visible emissions do not exceed 20% opacity on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a 3-hour period. [ME DEP, Chapter 140, BPT] **Enforceable by State-only**
2. UMaine shall operate the service building boiler such that visible air contaminants emitted do not exceed an opacity of 30% for more than 15 minutes in any continuous 3-hour period. [ME DEP, Chapter 101]
- (29) A. UMaine shall maintain records of facility-wide #2 (0.5%) fuel use indicating the quantity, in gallons, on a monthly and a 12 month rolling total basis and the percent (%) sulfur content of the fuel by weight demonstrated by fuel type. [ME DEP, Chapter 140, BPT]
- B. UMaine shall maintain records of the #6 (2.0%) fuel use indicating the quantity delivered, in gallons, along with the nitrogen content by weight, and the % sulfur by weight demonstrated by fuel analysis' provided by the supplier for each tank from which product is taken to be delivered to the University to be updated for each shipment the supplier receives and analyzes.
- (30) UMaine shall not exceed an annual #6 fuel use limit of 3,500,000 and an annual #2 fuel use limit of 500,000 gallons per year (each based on a 12 month rolling total) demonstrated by delivery records and monthly tank inventory records for #6 oil, and by purchase records for distillate oil. [ME DEP, Chapter 140, BPT] **Enforceable by State-only**

(31) Hitchner Hall Incinerator, Class IV-A Incinerator

- A. Emissions from the class IV-A incinerator shall not exceed the following limits:

Pollutant	gr/dscf	Origin and Authority	Enforceability
PM	0.20	ME DEP, Chapter 104, Section 2(B)	-

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	0.17	ME DEP, Chapter 140, BPT	Enforceable by State-only
PM ₁₀	0.17	ME DEP, Chapter 140, BPT	Enforceable by State-only
SO ₂	0.10	ME DEP, Chapter 140, BPT	Enforceable by State-only
NO _x	0.09	ME DEP, Chapter 140, BPT	Enforceable by State-only
CO	0.02	ME DEP, Chapter 140, BPT	Enforceable by State-only
VOC	0.01	ME DEP, Chapter 140, BPT	Enforceable by State-only

- B. Operating temperature in the secondary chamber or refractory lined stack shall be maintained at or above 1600⁰F with a stack gas retention time, at or above 1600⁰F, of at least 0.5 second. [ME DEP, Chapter 140, BPT]
- C. To ensure an efficient burn, and to prevent odors and visible emissions, the secondary chamber will be preheated, as specified by the manufacturer, until the pyrometer temperature measures a minimum of 1600⁰F prior to commencing the burn cycle. [ME DEP, Chapter 140, BPT]
- D. Once the burn cycle has commenced by introduction of waste to the primary chamber combustion, the incinerator shall be operated in an efficient manner and as specified by the manufacturer for the period of time between preheat and reaching the set operational temperature to be a minimum of 1600⁰F in the secondary chamber. [ME DEP, Chapter 140, BPT]
- E. The temperature in the secondary chamber or refractory lined stack shall be maintained at or above 1600⁰F for the duration of the burn cycle. [ME DEP, Chapter 140, BPT]
- F. A pyrometer and ¼ inch test port shall be installed and maintained at the location of the incinerator or refractory lined stack, which provides sufficient volume to insure a flue gas retention time of not less than 0.5 seconds at a minimum of 1600⁰F. [ME DEP, Chapter 140, BPT]
- G. 1. Visible emissions from the incinerator shall not exceed 10% opacity based on a six (6) minute block average. [ME DEP, Chapter 140, BPT]
Enforceable by State-only

2. UMaine shall not emit or cause to be emitted any particulate air contaminants from the incinerator darker than a number 1 on the Ringelmann Chart, excluding the emission of water vapor. [ME DEP, Chapter 104]

H. The ash will be disposed of in accordance with the requirements of the Bureau of Remediation and Waste Management. [ME DEP, Chapter 140, BPT]
Enforceable by State-only

I. The incinerator operator(s) shall receive adequate training to operate the incinerator in accordance with the manufacturer's specifications and shall be familiar with the terms of the Air Emission License. [ME DEP, Chapter 140, BPT] **Enforceable by State-only**

J. Recordkeeping

A log shall be maintained recording the weight of the waste charged, preheat time, charging time and the temperature of the secondary chamber every 60 minutes after start-up until, and including, final shutdown time. For facilities operating a chart recorder, the start time, date, and weight of waste charged shall be logged on the chart. [ME DEP, Chapter 140, BPT] **Enforceable by State-only**

(32) Parts Washer

UMaine shall label the parts washer with operational standards, equip the washer with cover if vapor pressure >15 mmHG at 100°F, close cover when not in use, drain parts for 15 seconds or longer, shall not degrease porous material, keep drafts < 40 m/minute, repair leaks, and keep records of solvent added and removed. [ME DEP, Chapter 130]

(33) Gasoline Storage

For all gasoline storage tanks, UMaine shall comply with the following: [ME DEP, Chapter 118]

- A. The fill pipe shall extend to within six (6) inches of the bottom of the storage tank, and
- B. UMaine shall maintain records of the monthly and annual throughput of gasoline.

(34) Stationary Internal Combustion Engines (SICE)

UMaine shall maintain a log documenting the hours of operation for each of the following SICE units: [ME DEP, Chapter 140, BPT] [ME DEP, Chapter 138]

Generator Location	Power Output (kW)
P.A.C.	95
York	40
Hilltop	40
Memorial Gym	50
Alfond Arena	150
Neville Hall	250
Portable Unit	225

(35) Recordkeeping

For all recordkeeping required by this license, the licensee shall maintain records of the most current six year period. [ME DEP, Chapter 140]

A. The following records shall be maintained for boilers #3 - #7:

1. Annual #6 fuel use indicating the quantity of fuel consumed (in gallons) based on delivery records and monthly tank inventories of fuel in and out of the single fuel oil storage tank (taken at the beginning and end of each month), the percent (%) sulfur content of the fuel by weight, and the nitrogen content of the fuel demonstrated by fuel analysis' from the supplier. Annual records shall be kept on a 12 month rolling total basis. [ME DEP, Chapter 138]
2. Record of annual tune-ups to include the following: [ME DEP, Chapter 138]
 - a. tune-up procedure file,
 - b. an oxygen/carbon monoxide curve or an oxygen/smoke curve,
 - c. verification of the optimum oxygen setting, and
 - d. proof that the fuel and air mixing have been improved if the minimum oxygen level is found to be substantially higher than the value provided by the manufacturer.

B. Annual #2 fuel use indicating the quantity of fuel consumed campus wide (in gallons) based on purchase receipts, and the percent sulfur content of the fuel by weight demonstrated by fuel type. Annual records shall be kept on a 12 month rolling total basis.

C. For the class IV-A incinerator a log shall be maintained recording the weight of the waste charged, preheat time, charging time and the temperature of the secondary chamber every 60 minutes after start-up until, and including, final shutdown time. For facilities operating a chart recorder, the start time, date, and weight of waste charged shall be logged on the chart.

- D. Records of all chemical usage in the printing services department, to include the amount used, the VOC content and the percentage HAP for each of the chemicals on an annual basis.
 - E. Records of solvent added to the solvent degreaser. [ME DEP, Chapter 130]
 - F. UMaine shall maintain records of the monthly and annual throughput of gasoline at each dispensing station. [ME DEP, Chapter 118]
- (36) **Stack Testing**
- A. All stack testing programs shall comply with all of the requirements of the ME DEP Compliance Test Protocol and with 40 CFR Part 60, as appropriate, or other methods approved by the Department and EPA. [ME DEP, Chapter 140, BPT]
 - B. UMaine shall conduct annual stack emission testing, and demonstrate compliance with the NO_x emission limits on units #5 or #6 and #7 by May 31 of each year. UMaine may apply to amend the license to reduce the frequency of testing. [ME DEP, Chapter 138, NO_x RACT]
 - C. UMaine shall conduct an annual Method 9-Visual Determination of the Opacity of Emissions from Stationary Sources in accordance with 40 CFR Part 60, Appendix A for stacks #1 and #4 to demonstrate compliance with all of the opacity limits in condition (25). [ME DEP, Chapter 140, BPT]
- (37) **Semiannual Reporting**
- The licensee shall submit semiannual reports every six months to the Bureau of Air Quality. The initial semiannual report is due (insert date), 30 days from the end of the second calendar quarter following the date of signature of this license. [ME DEP, Chapter 140]
- A. Each semiannual report shall include a summary of the periodic monitoring required by this license.
 - B. All instances of deviations from license requirements and the corrective action taken must be clearly identified and provided to the Department in summary form for each six-month interval.
- (38) **Annual Compliance Certification**
- The licensee shall submit an annual compliance certification to the Department in accordance with Condition (20) of this license. The initial annual compliance certification is due (insert date) with the submittal of the second semiannual report after the signature date of this license. [ME DEP, Chapter 140]

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**Department
Findings of Fact and Order
Part 70 Air Emission License**

(39) **Annual Emission Statement**

The licensee shall annually report to the Department, in a specified format, fuel use, operating rates, use of materials and other information necessary to accurately update the State's emission inventory. [ME DEP, Chapter 137]

(40) The licensee is subject to the State regulations listed below.

<u>Origin and Authority</u>	<u>Requirement Summary</u>
Chapter 102	Open Burning
Chapter 109	Emergency Episode Regulation
Chapter 110	Ambient Air Quality Standard
Chapter 116	Prohibited Dispersion Techniques

(41) **Certification by a Responsible Official**

All documents and reports (including semiannual reports, and annual compliance certifications) required by this license to be submitted to the Bureau of Air Quality must be signed by a responsible official. [ME DEP, Chapter 140]

(42) The term of this license shall be five (5) years from the signature date below.

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2000.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
MARTHA G. KIRKPATRICK, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: October 28, 1997

Date of application acceptance: October 28, 1997

Date filed with the Board of Environmental Protection _____

This Order prepared by Stephanie C. Toothaker, Bureau of Air Quality.